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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,715	12/30/2003	Cecil Brown	003C.0006.U2(US)	9216
29683	7590	10/05/2004	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			HAMMOND, BRIGGITTE R	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/749,715

Applicant(s)

BROWN, CECIL

Examiner

Brigitte R. Hammond

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/30/03, 5/7/04</u>  | 6) <input type="checkbox"/> Other: ____                                     |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: in page 3, line 6, insert - -6,705,886- - in the blank space.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14-21 and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 14 and 23, in line 20 of claim 14 and line 4 of claim 23, the terms "adapted to be prevented" is unclear to the examiner, since the portion "adapted to be prevented" is another structure. Consider deleting "adapted to be". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 34,35,37 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Shiraki et al. 6,419,510. Shiraki et al. disclose an electrical connector comprising: a housing having a deflectable cantilevered mating connector latch arm , wherein the latch arm is movable between a latched position and an unlatched position; electrical contacts 30 connected to the housing; and a connector position assurance (CPA) 5 member movably mounted to the housing between an open position and a closed position, the CPA member 5 comprising a top section 50 and a downwardly extending section (not numbered, near 58 in fig 2) extending down from the top section, the downwardly extending section comprising two downwardly extending rails 53, wherein the rails are slidably located on the housing, and wherein the downwardly extending section comprises a bottom section at bottom ends the rails which is adapted to contact a shorting clip 24 of a mating electrical connector and move the shorting clip off connection with contacts of the mating electrical connector (col. 9, lines 15-20).

Regarding claim 35, Shiraki et al. disclose the bottom section of the downwardly extending section comprises the bottom ends of the two rails individually contacting the shorting clip.

Regarding claim 37, Shiraki et al. disclose a method of assuring a position of an electrical connector in a mating connector comprising steps of: inserting a portion of the electrical connector into the mating connector 2, the electrical connector comprising a housing 34,36 and a connector position assurance (CPA) 5 member movably mounted the housing, the CPA member comprising a top section 50 and downwardly extending rail 53 slidably located on the housing; deflecting a section 55 of the CPA member from

a home position by contact of the section with a housing of the mating connector as the CPA member is inserted into the mating connector; and moving the CPA member of the electrical connector from an open position on the housing of the electrical connector towards a closed position, wherein the step of moving comprises deflecting an interference portion 54 of the CPA member into a gap between a latch the housing of the electrical connector and a main section of the housing of the electrical connector to prevent the latch from being moved from a latching position to an unlatched position (col. 7, lines 35-60).

Regarding claim 38, Shiraki et al. disclose a method of assuring connector in a mating connector position of electrical comprising steps of: inserting a portion 31 of the electrical connector into the mating connector, the electrical connector comprising a housing 34,36 and connector position assurance (CPA) member 5 movably mounted to the housing, the CPA member 5 comprising a top section 50 and two downwardly extending rails 53 slidably located on the housing; deflecting a section of the CPA member from a home position by contact of the section with a housing of the mating connector as CPA member inserted into the mating connector; and moving the CPA member the electrical connector from an open position on the housing of the electrical connector towards a closed position, wherein the step of moving comprises at least one bottom portion of the CPA member at bottom ends of the rails contacting a shorting clip 24 of the mating connector and moving the shorting clip off of connection with contacts of the mating connector.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22 and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraki et al. in view of EP 1207 591. Regarding claim 22, Shiraki et al. disclose an electrical connector 3 comprising: a housing 34,36 having a main body and a first mating connector latch arm 41 on a lateral side of the main body, wherein the first latch arm comprises a deflectable cantilevered arm 42, wherein gap is provided between the main body and first latch arm, and wherein the first latch arm 41 is movable between a home latched position and an inwardly deflected unlatched position; electrical contacts 30 connected to the housing; and connector position assurance (CPA) member 5 movably mounted to the housing between an open position and a closed position, the CPA member comprising a deflectable cantilevered section 51 extending in a downward direction, wherein the deflectable cantilevered section comprises a cam surface at 55 adapted to be contacted by a mating electrical connector at 15 when inserted into the mating electrical connector and deflected by the mating electrical connector towards the gap between the main body and the latch arm, and wherein the CPA member further comprises a detent and retaining section 51,52,54,54a,55 for retaining the CPA member at open or closed positions until positively moved by a user. Shiraki et al. do not disclose the latch arm extending in an upward direction. However, latch arms extending in an upward direction is well known in the art as evidenced by EP 1207 591. EP 1207

591 disclose a latch arm 5 extending in an upward direction. It would have been obvious to one of ordinary skill to modify the connector of Shiraki et al. by providing a latch arm extending in an upward direction instead of downward for convenience, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 26, Shiraki et al. discloses the portion of the deflectable cantilevered section comprises a distal free end (at 54a) of the deflectable cantilevered section.

Regarding claim 27, Shiraki et al. discloses the first latch arm comprises a temporary clearance notch 60 on a front side of the first latch arm.

Regarding claim 28, Shiraki et al. discloses the CPA member 5 comprising a top section 50 and a downwardly extending section extending down from the top section, the downwardly extending section comprising two downwardly extending rails 53, wherein the rails are slidably located on the housing, and wherein the downwardly extending section comprises a bottom end a bottom end of the rails which is adapted to contact a shorting clip 24 of a mating electrical connector and move the shorting clip off of connection with contacts of the mating electrical connector.

Regarding claim 29, Shiraki et al. discloses the detent and retaining section comprises a center section 51 of the CPA member comprising a forward extending detent protrusion 54.

Regarding claim 30, Shiraki et al. discloses the housing comprising a rearward extending detent protrusion 61 adapted to interact with the forward extending detent

protrusion to retain the forward extending detent protrusion above or below the rearward extending detent protrusion (see fig. 3).

Regarding claim 31, Shiraki et al. discloses the detent and retaining section comprises a rail 51 of the CPA member having a protrusion 54 adapted be located above or below a ledge 61 of the housing, wherein the protrusion is adapted to be moved into a receiving area below the ledge the rail is deflected by a portion of a mating electrical connector (see fig. 3).

Regarding claim 32, Shiraki et al. discloses the protrusion 54 inwardly facing the housing.

#### ***Allowable Subject Matter***

Claims 14 and 23-25 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 33 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including **all** of the limitations of the base claim and any intervening claims.

Regarding claims 14 and 23, patentability resides, at least in part, in the portion being prevented from extending into the gap when the first latch arm is at the unlatched position, in combination with the other limitations of the base claim.

Regarding claim 33, patentability resides, at least in part, in the CPA having a second rail, and the inwardly facing protrusion projects towards the second rail, in combination with the other limitations of the base claim.



Regarding claim 36, patentability resides, at least in part, in the bottom section of the downwardly extending section comprising an end portion connecting the bottom ends of the rails to each other, in combination with the other limitations of the base claim.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pacher 5,853,298 was cited for a similar connector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brigitte R. Hammond whose telephone number is 571-272-2006. The examiner can normally be reached on Mon.-Thurs. and Alternate Fridays from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, reading "Brigitte Hammond". The signature is written in a cursive, flowing style with a large, looped initial "B".

Brigitte R. Hammond  
Examiner  
Art Unit 2833

September 28, 2004